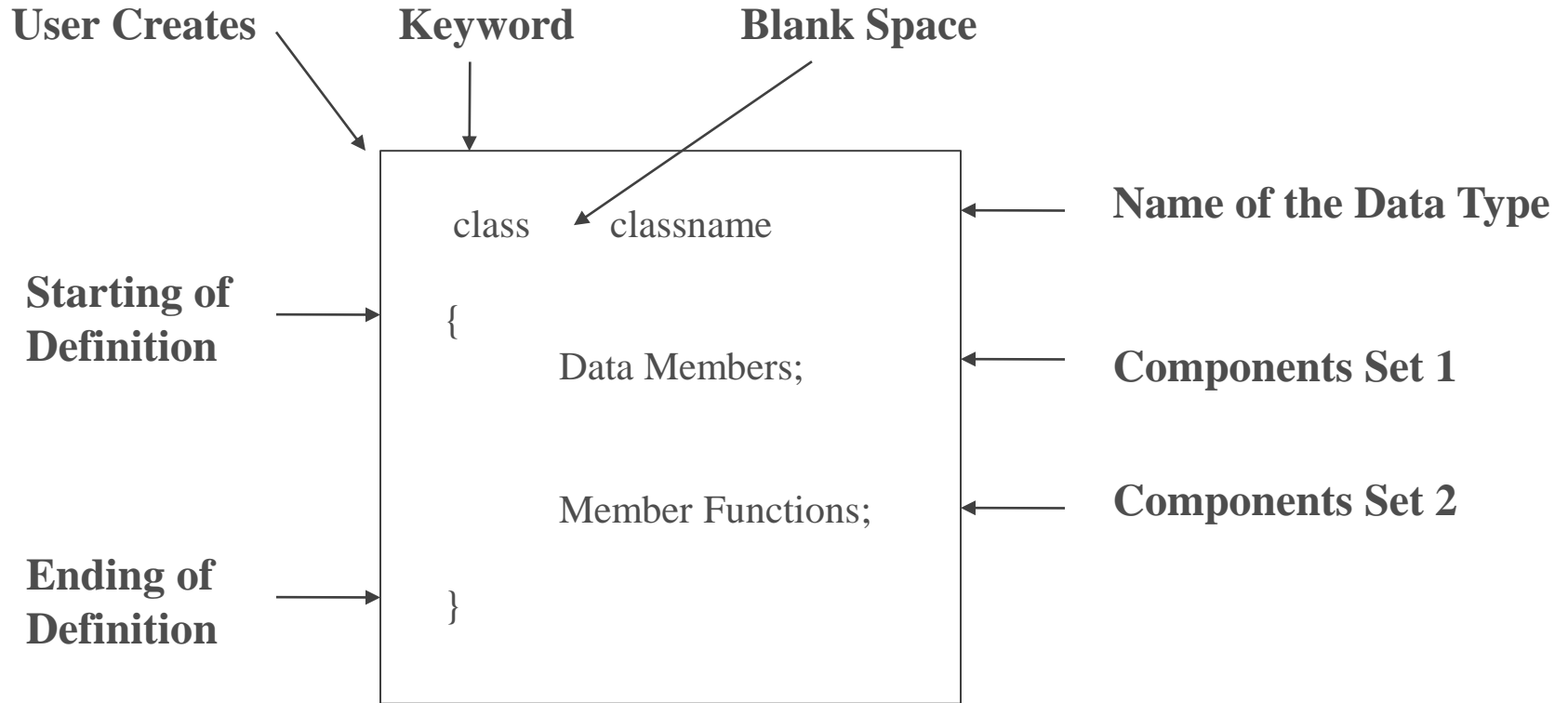# Create a Data Type

By
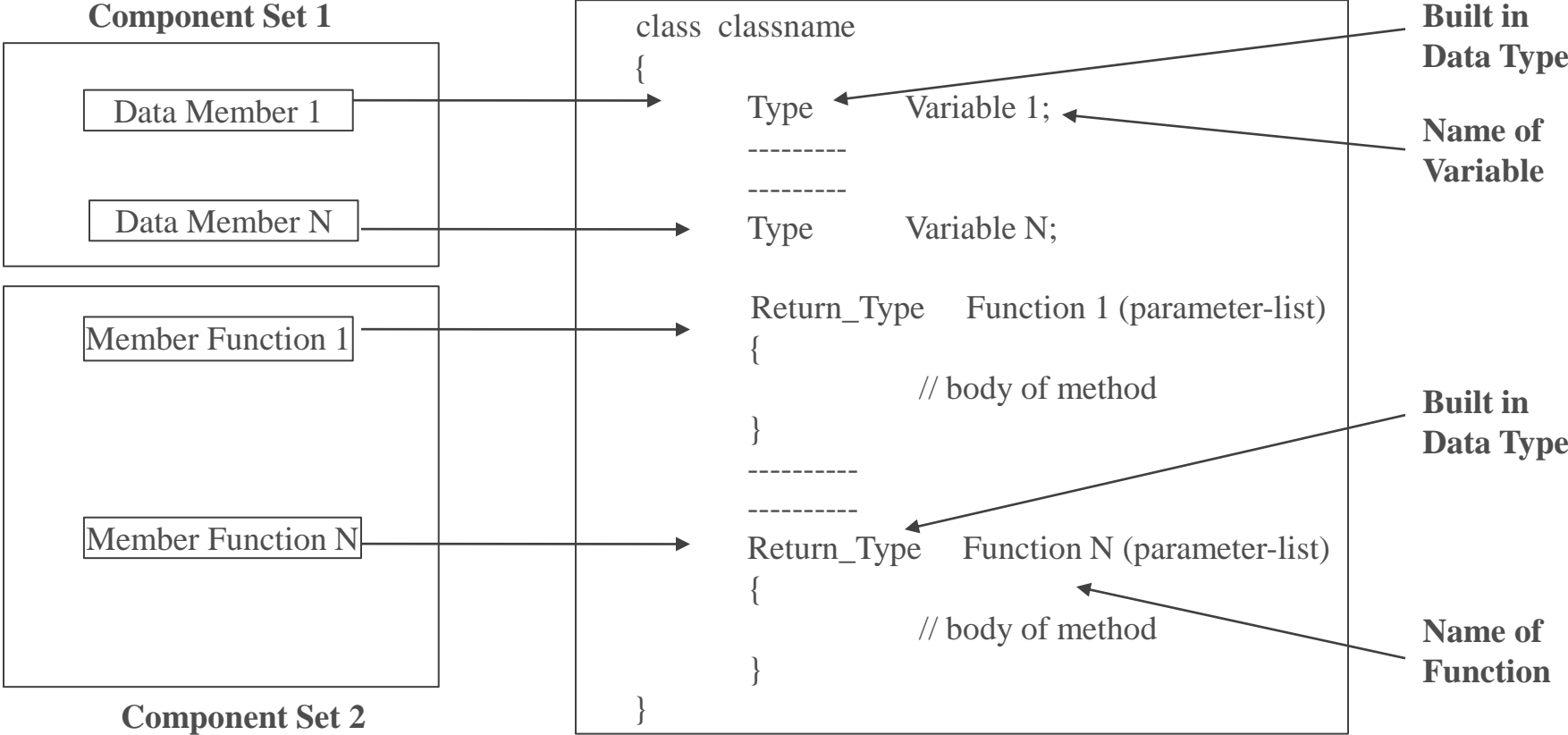
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Creating a Data Type

User Creates   **Keyword**   **Blank Space**

class   classname   **Name of the Data Type**

Starting of Definition

{

    Data Members;   **Components Set 1**

    Member Functions;   **Components Set 2**

Ending of Definition

}

Creating a Data Type

Component Set 1

Data Member 1

Data Member N

Member Function 1

Member Function N

Component Set 2

```
class  classname
{
        Type            Variable 1;
        ---------
        ---------
        Type          Variable N;

        Return_Type     Function 1 (parameter-list)
        {
                    // body of method
        }
        ----------
        ----------
        Return_Type     Function N (parameter-list)
        {
                    // body of method
        }
}
```

Built in Data Type

Name of Variable

Built in Data Type

Name of Function

Creating a Data Type

```
class  classname
{
        Type          Variable 1;
        ---------
        ---------
        Type          Variable N;

        Return_Type     Function 1 (Data Type Variable 1, ….., Data Type Variable N)
        {
                  // body of method

        }
        ----------
        ----------
        Return_Type     Function N (Data Type Variable 1, ….., Data Type Variable N)
        {
                  // body of method

        }
}
```

Heap

Instance Variable 1

Stack

Local Variable 1

So What is a Class?

- ✓ Class is a User-defined Data type

- ✓ Class contains Data Members and Member Functions

- ✓ Java Program contains One or More Classes

- ✓ Heap Memory is allocated for Instance variables of a class

- ✓ Stack Memory is allocated for Local variables of methods in a class

So Why do we need a Class?

- ✓ Everything in this world are Objects

- ✓ Similar Objects are having Common set of Properties

- ✓ A new Object can be created using Common Properties

- ✓ Common set of Properties are defined in a Class

- ✓ Finally, Class is a template for Objects

Thank you